Do It Yourself!! Antimicrobial-impregnated rod in treating Osteomyelitis: A Case Report

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INTRODUCTION:

Osteomyelitis is a inflammatory condition of the bone. It remains a therapeutic challenge for a surgeon as it requires long and expensive antibiotics treatment[1]. Thus, we present a case of cost-effective method in treating osteomyelitis with a antimicrobial impregnated rod.

CASE REPORT:

A 45 years old gentleman involved in a MVA, sustained an open fracture of the right tibia, he underwent intramedullary nail insertion of the right tibia, which was complicated by infective non union. Subsequently, developed a severe osteomyelitis. Infective markers revealed MRSA (Methicillin-resistant Staphylococcus Aureus).

Patient received suppression therapy of intravenous antibiotics for 2weeks duration. Patient was then planned for removal of nail, resection of bone with antibiotic coated rod insertion, Second stage surgery :-corticotomy and transport on intramedullary nail. however due to financial constrain, modification of an *Iliazarov* rod, mimicking a tibial intramedullary nail and was coated with antibiotic cement. The rod was inserted into the canal. After 6weeks, the antibiotic coated rod was removed and the a new interlocking nail was inserted.

Post operatively, noted the callus formation was satisfactory. Patient was allowed to weight bear and range of motion of the right knee was 0-100 degree.

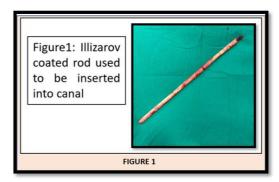


Figure 1: An antibiotic coated rod

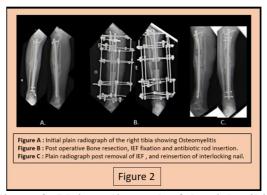


Figure 2: Plain radiograph of the right tibia pre operatively and post operatively

CONCLUSION:

The management of osteomyelitis is complicated, time and cost consuming, thus needing proper bone stabilization, bone segment excision, local and systemic antibiotic therapy. The goal is for elimination of infection and promotion of bone union, however in this patient we were able to achieve and cost effective method to achieve our goal.

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